

IN THE CLAIMS:

Please amend claims 1 and 3-28, cancel claim 2 without prejudice and disclaimer, and add new claims 29 and 30 as follows.

1. (Currently amended) A method for controlling an inter-working function linked with an Asynchronous Transfer Mode (ATM) transport network and an Internet Protocol (IP) transport network, ~~characterised in that comprising:~~

configuring said inter-working function to use ~~uses~~ a user defined information element of an existing protocol;

using the existing protocol to establish, ~~that is used for establishing the data transport bearers;~~ to adapt a new protocol for controlling the transport bearers in ~~the a~~ Transport Network Layer; and

conveying transport related information between entities in the ATM and IP transport networks for controlling the transport bearers in the Transport Network Layer.

2. (Cancelled)

3. (Currently amended) The method according to claim 2, ~~characterised in that~~ wherein said transport related information includes at least one of ~~the following information:~~ transport network layer address information, transport network layer resource information, Transmission Time Interval of the transport network layer user, packet size information and Quality of Service information

4. (Currently amended) The method according to claim 1, ~~characterised in that~~
further comprising:

using said ATM transport network ~~is used in a~~ Radio Access Network; ~~and that,~~
wherein said existing protocol is Access Link Control Application Protocol (ALCAP)
protocol based on ATM Adaptation Layer Type 2 (AAL2) Signalling.

5. (Currently amended) The method according to claim 4, ~~characterised in that~~
wherein said AAL2 signalling is based on International Telecommunication Union (ITU)
Recommendation Q.2630.

6. (Currently amended) The method according to claim 5, ~~characterised in that~~
further comprising:

utilizing as said user defined information element of an existing ALCAP protocol
~~is utilised a~~ Served User Transport (SUT) Element of said Q.2630 signalling.

7. (Currently amended) The method according to claim 1, ~~characterised in that~~
further comprising:

using said user defined information element in said new protocol for conveying
information needed by said existing ~~ALCAP~~-protocol, wherein said existing protocol
comprises ALCAP.

8. (Currently amended) The method according to claim 1, ~~characterised in that~~
further comprising:

including said user defined information element in ~~the~~ an Establish Confirm message of said existing ~~ALCAP~~ protocol, wherein said existing protocol comprises ALCAP.

9. (Currently amended) The method according to claim 1, ~~characterised in that~~ further comprising:

including said user defined information element in ~~the~~ an Establish Request message of said existing ~~ALCAP~~ protocol, wherein said existing protocol comprises ALCAP.

10. (Currently amended) The method according to claim 2, ~~characterised in that~~ when further comprising:

receiving an address information of an Radio Access Network node;

checking ~~the check is made~~ whether said address information is compatible with an address space of receiving protocol; and

if said address information is not compatible, determining an ~~the~~ address of said inter-working function ~~is determined~~.

11. (Currently amended) The method according to claim 10, ~~characterised in that~~ wherein the determining of the address of said inter-working function is ~~determined by~~ default for each network node.

12. (Currently amended) The method according to claim 10, ~~characterised in that~~
further comprising:

querying the address of said inter-working function ~~is queried from a centralised~~
centralized location in said network.

13. (Currently amended) The method according to claim 10, ~~characterised in that~~
wherein the determining of the address of said inter-working function is ~~determined~~
based on a physical port from which an Application Protocol message ~~was~~ is received.

14. (Currently amended) The method according to claim 10, ~~characterised in that~~
wherein the determining of the address of said inter-working function is ~~determined~~
based on a logical port from which an Application Protocol message was received.

15. (Currently amended) The method according to claim 10, ~~characterised in that~~
~~said check is made~~ wherein the checking comprises using a type of address information
field that indicates at least one of ~~the following~~ a set including, ~~the~~ a type of a network
node, a type of address and a type of Transport Layer.

16. (Currently amended) The method according to claim 10, ~~characterised in that~~
~~said check is made~~ wherein said checking comprises using a type of node information
field that indicates at least one of ~~the following~~ a set including, ~~the~~ a type of a network
node, a type of address and a type of Transport Layer.

17. (Currently amended) The method according to claim 7, ~~characterised in that~~
~~said check is made~~wherein said checking comprises ~~using~~ a type of transport layer
information field that indicates at least one of ~~the following~~ a set including, ~~the~~ a type of
a network node, a type of address and a type of Transport Layer.

18. (Currently amended) The method according to claim 1, ~~characterised in that~~
further comprising:

making in said inter-working function a mapping between the a first interface of
said existing protocol and ~~the~~ a second interface of said new protocol ~~is made in said~~
~~inter-working function~~, wherein said mapping is based on information in said user
defined element.

19. (Currently amended) The method according to claim 1, ~~characterised in that~~
further comprising implementing said inter-working function ~~is implemented as~~ a stand-
alone node in said ATM transport network.

20. (Currently amended) The method according to claim 1, ~~characterised in that~~
further comprising:

implementing said inter-working function ~~is implemented as~~ a stand-alone node in
a transport network.

21. (Currently amended) The method according to claim 1, ~~characterised in that~~
further comprising:

implementing said inter-working function ~~is implemented~~ as a part of a network
node in said ATM transport network.

22. (Currently amended) The method according to claim 1, ~~characterised in that~~
further comprising:

implementing said inter-working function ~~is implemented~~ as a part of a network
node in a transport network.

23. (Currently amended) The method according to claim 20, ~~characterised in that~~
wherein said transport network is based on IP network.

24. (Currently amended) A ~~System~~ system comprising:
~~for controlling an~~ inter-working function linked with an Asynchronous Transfer
Mode (ATM) transport network and an Internet Protocol (IP) transport network,
~~characterised in that~~

wherein said inter-working function comprises a mapping entity that is ~~arranged~~
configured to:

use a user defined information element of an existing protocol, that is used for
establishing ~~the~~ data transport bearers, to adapt a new protocol for controlling the
transport bearers in ~~the~~ a Transport Network Layer, and

convey transport related information between entities in the ATM and IP transport networks for controlling the transport bearers in the Transport Network Layer.

25. (Currently amended) The system according to claim 24, ~~characterised in that~~ wherein said ATM transport network is used in Radio Access Network; and ~~that wherein~~ said existing protocol is an Access Link Control Application Protocol (ALCAP) protocol based on ATM Adaptation Layer Type 2 (AAL2) Signalling.

26. (Currently amended) The system according to claim 25, ~~characterised in that~~ wherein said AAL2 signalling is based on International Telecommunication Union (ITU) Recommendation Q.2630.

27. (Currently amended) The system according to claim 26, ~~characterised in that~~ further comprising:

utilizing as said user defined information element of an existing protocol ~~is utilised~~ a Served User Transport (SUT) Element of said Q.2630 signalling.

28. (Currently amended) The system according to claim 24, ~~characterised in that~~ ~~the system further comprises~~ comprising:

a checking entity configured to ~~for making a check~~ whether an address information is compatible with an address space of receiving protocol, when receiving an address information of an Radio Access Network node; and

an address determining entity configured to determine an ~~for determining the~~
address of the said inter-working function.

29. (New) An apparatus comprising:

controlling means for controlling an inter-working function linked with an
Asynchronous Transfer Mode (ATM) transport network and an Internet Protocol (IP)
transport network;

mapping means for using a user defined information element of an existing
protocol for establishing data transport bearers to adapt a new protocol for controlling the
transport bearers in a Transport Network Layer; and

conveying means for conveying transport related information between entities in
the ATM and IP transport networks for controlling the transport bearers in the Transport
Network Layer.

30. (New) A computer program embodied on a computer readable medium, the
computer readable medium storing code comprising computer executable instructions
configured to control an inter-working function linked with an Asynchronous Transfer
Mode (ATM) transport network and an Internet Protocol (IP) transport network by
performing:

configuring said inter-working function to use a user defined information element
of an existing protocol;

using the existing protocol for establishing data transport bearers to adapt a new protocol for controlling the transport bearers in a Transport Network Layer; and

conveying transport related information between entities in the ATM and IP transport networks for controlling the transport bearers in the Transport Network Layer.